

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-10 are active in this application. Claims 1 and 4 are amended. New Claims 7-10 are added. No new matter is added.

In the outstanding Official Action, Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukui (JP 62072202A hereinafter “Fukui”) in view of Tomonaga (U.S. Pat. No. 3,951,904 hereinafter “Tomonaga”); Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Praba et al. (U.S. Pat No. 4,906,952 hereinafter “Praba”) in view of Fukui and in view of Tomonaga. However, Claims 2, 3, 5, and 6 were objected to as depending on a rejected base claim, but were otherwise indicated as including allowable subject matter.

Applicants acknowledge with appreciation the indication that Claims 2, 3, 5 and 6 include allowable subject matter.

Claim 1 is directed to nonreflective waveguide terminator comprising a waveguide portion and an electromagnetic wave absorber. The waveguide portion is described as “having a rectangular opening in a plane perpendicular to a radio-wave propagation direction, said waveguide portion having one open end in the radio-wave propagation direction and the other end closed by a terminating metal internal wall, said waveguide portion having a radio-wave propagation space surrounded by a first metal internal wall and a second metal internal wall opposite thereto which include the shorter sides of the rectangular opening and which are parallel to a radio-wave electric field, and a third metal internal wall and a fourth metal internal wall opposite thereto which include the longer sides of the rectangular opening and which are perpendicular to the radio-wave electric field.” Claim 1 further recites that the exterior shape of the electromagnetic wave absorber is parallelepiped, “said electromagnetic

wave absorber [has] a rectangular rear-end surface” and “the surface of said electromagnetic wave absorber, which has the largest rectangular area, [is] on one of the third metal internal wall and the fourth metal internal wall.” Original Claim 1 recites that the rear-end surface of the electromagnetic wave absorber **“is positioned at a predetermined distance from the terminating metal internal wall and parallel to the terminating metal internal wall or is provided against the terminating metal internal wall.”** Applicants amend Claim 1 to remove the alternative positioning of the rear-end surface of the electromagnetic wave absorber against the metal terminating internal wall. Consequently, amended Claim 1 recites the rear-end surface of the electromagnetic wave absorber **“is positioned at a predetermined distance from the terminating metal internal wall and parallel to the terminating metal internal wall.”**

Fukui discloses a microwave terminating set with the absorber body against the terminating wall as illustrated in Figure 3. Fukui does not teach or suggest to have the rear-end surface of the electromagnetic wave absorber “positioned at a predetermined distance from the terminating metal internal wall and parallel to the terminating metal internal wall.”

Tomonaga discloses an electromagnetic absorbing material containing carbon microspheres; in Tomonaga the absorber is not integrated in a structure to form a nonreflecting waveguide terminator. Therefore, Tomonaga does not remedy the above identified deficiency of Fukui.

As the cited references, individually or in combination, do not disclose or suggest all the elements of independent Claim 1, Applicants respectfully submit the inventions defined by Claim 1 and all claims depending therefrom, patentably define over the asserted prior art for at least the reasons stated above.¹

¹ MPEP § 2142 “...the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).”

Claim 4 recites a waveguide circuit including waveguide functional portions, each portion containing a nonreflecting waveguide terminator. The nonreflecting waveguide terminator includes a waveguide portion and an electromagnetic wave absorber. Claim 4 is amended to recite that the rear-end surface of the electromagnetic wave absorber is positioned at a predetermined distance from the terminating metal internal wall.

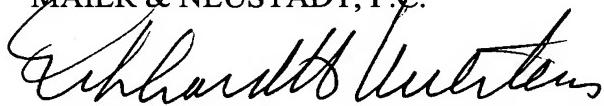
As discussed in regard to Claim 1, Fukui and Tomonaga do not teach or suggest having the rear-end surface of the electromagnetic wave absorber “positioned at a predetermined distance from the terminating metal internal wall and parallel to the terminating metal internal wall.” In Praba the absorbing material is placed against the terminating wall as shown in Figures 1a, 1b and 1c. Praba does not cure the deficiency of Fukui and Tomonaga in teaching or suggesting individually or in combination, all the elements of the waveguide circuit as recited in Claim 4. Therefore, it is respectfully submitted that amended Claim 4 patentably defines over the cited references.

New independent Claim 7 recites a nonreflective waveguide terminator as in original Claim 1, including the limitations of dependent Claim 2, but limiting the position of the rear-end surface of the electromagnetic wave absorber to the alternate position in original Claim 1, i.e. “**against the terminating metal internal wall**”. Claim 8 depends on Claim 7 and recites the limitations corresponding to Claim 3. Claim 9 corresponds to Claim 5 re-written in independent form, for the case when the position of the rear-end surface of the electromagnetic wave absorber is the alternate position in original Claim 4, i.e. “against the terminating metal internal wall”. Claim 10 depends on Claim 9 and recites the limitations corresponding to Claim 6. In light of the Office Action indication that Claims 2, 3, 5, and 6 would be allowable if rewritten in independent form, Applicants respectfully submit that new Claims 7-10 are allowable because the new claims are within the scope of the indicated allowable subject matter.

Accordingly, in light of the above discussion, the indication of allowable subject matter, and in view of the present amendment, no further issues are believed to be outstanding and the present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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